

Remarks

1. Introduction

Claims 1-24 are pending.

2. Double Patenting

Claims 1, 2, 9, 13, and 14 were rejected under obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 6,658,257. Applicants submit a terminal disclaimer in response.

3. Claim Objections

Claim 1 was objected to as including the word “share” instead of “shared.” Applicants amend claim 1 where believed appropriate.

4. Rejections based on 35 U.S.C. §§102, 103

Claims 1, 2, 8-12, 13 and 14 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 5,708,969 (Kotzin et al.). Claims 3 and 4 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kotzin et al. in view of U.S. Patent No. 5,857,154 (Laborde et al.). Claims 5-7 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kotzin et al. in view of U.S. Patent No. 5,542,093 (Bodin et al.).

The Kotzin reference discloses a frequency allocation method for a single carrier, whereby co-channel or adjacent channel interference is reduced. See col. 2, lines 26-57; col. 5, line 66 – col. 6, line 61; see also Figs. 9A and 9B. Further, Kotzin discloses dividing a shared predetermined frequency band for the single carrier into two communication frequency bands (first spectrum X and second spectrum Y). Kotzin discloses the following:

The first spectrum (X) is reserved for communication units close to the base station site (18 through 24) and has a relatively large, first threshold value associated with the first spectrum. The second spectrum (Y) is reserved for communication units (30 through 33) operating relatively far from the base station site (18 through 24) and has a relatively small, second threshold value associated with the second spectrum (Y).

Col. 4, lines 23-30.

The Laborde reference teaches a multiprotocol radio communications network that includes a first plurality of stationary transceivers for handling low-tier traffic and a second plurality of stationary transceivers for handling high-tier traffic. See abstract. The Laborde reference teaching is directed to assigning of communications to various transceivers.

The Bodin reference teaches a method of setting up and handing off calls in a mobile cellular radio system in which consideration is given to the load capacity of several types of channels. See abstract. Specifically, the Bodin reference teaches re-distributing calls based on load capacity of the channels.

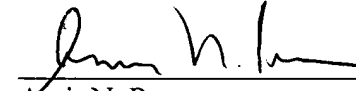
In contrast to the cited references, one aspect of the present invention is to reduce interference between a plurality of carriers providing communication in overlapping service areas. Thus, as a general matter, the Kotzin reference is clearly different from the present invention as claimed since it is directed to a single carrier. For example, claim 1 recites “adjacent communication frequency bands which are adjacent to communication frequency bands allotted to other carriers”, which is not taught or even suggested by the Kotzin reference. Because the frequency bands are from different carriers (and not from the same carrier), this may cause special problems if interference occurs.

Moreover, none of the cited references teach allotting communications to adjacent frequency bands to communications that have low power. The Kotzin reference merely teaches two frequency bands (first spectrum X and second spectrum Y). Low power communications are put in the first spectrum X and high power communications are put in the second spectrum Y. Thus, Kotzin simply assigns low power communications anywhere within X and assigns high power communications anywhere within Y. However, Kotzin does not teach any special allocation for the part of the spectrum that is adjacent (where the X spectrum is adjacent to the Y spectrum). For example, Kotzin merely teaches that a low power communication is assigned to one edge of the X spectrum and a high power communication is assigned another edge of the Y spectrum. This is in contrast to the invention as claimed. Thus, apart from merely using a single carrier, Kotzin does not provide for any special treatment for communications at the adjacent portion of the frequency spectrum. Similarly, the Laborde and Bodin references do not provide for any special treatment. Therefore, the claims as presently recited are patentable over the cited art.

Summary

Applicant respectfully requests the Examiner grant early allowance of this application. The Examiner is invited to contact the undersigned attorneys for the Applicant via telephone if such communication would expedite this application.

Respectfully submitted,



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